Abstract of the Disclosure

A method to revalidate a compiler intended for compilation of a user-written program for safety control in an industrial control system after it has been used. A test program is compiled a first time which test program is defined in a control language. The compiler is validated by verifying that the test program executes correctly. A first software is generated derived from the compiled test program intended for later comparison purposes. The test program is compiled a second time after the compilation of a user-written program. A second software is generated intended for a comparison based on the second compilation of the test program. The first software is compared with the second software, wherein the compiler is revalidated for any errors introduced between the first and the second compilation. Provided that the revalidation indicates no errors in the compiler, the user-written program is enabled to execute in a device with safety features for control of real world entities.